

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: David W. JOHNSON, et al. Confirmation No.: 1511

Serial No.: 10/698,424 Group Art Unit: 1638

Filed: November 3, 2003 Examiner: Keith O'Neal Robinson

For: ALFALFA PLANTS HAVING IMPROVED STANDABILITY AND/OR FAST  
RECOVERY AFTER HARVEST AND METHODS FOR PRODUCING SAME

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U.S. Patent and Trademark Office  
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**DECLARATION UNDER 37 C.F.R. § 1.132**

I, David W. JOHNSON, Ph.D., declare as follows:

1. Cal/West Seeds ("Cal/West") is the assignor of the above-referenced U.S. Patent Application ("the '424 application"). I am the Assistant Director of Research for Cal/West.

2. I am a named co-inventor of the '424 application. I am familiar with the specification, the pending claims and the prosecution file history of the '424 application.

3. I have read and understand the Non-Final Office Action dated June 5, 2009. Claims 2-4 and 6-19 stand rejected under 35 USC § 112, first paragraph, as allegedly failing to comply with the written description requirement. More specifically, the Office Action alleges that "Applicants have possession of a narrow genetic base and is broadly claiming the phenotype." Claims 2-4 and 6-19 also stand rejected under 35 USC § 112, first paragraph, as allegedly failing to comply with the enablement requirement. More specifically, the Office Action alleges that "[T]he claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention."

4. The presently pending claims are directed to *Medicago sativa* alfalfa varieties with 8% or greater recovery after spring green-up or after harvest coupled with having 15% or greater more erect stems at late bloom when compared to specific commercial check varieties grown under the same field growing conditions, wherein such checks were among the best commercial check varieties available at time of the present invention. The '424 application provides adequate and detailed written descriptions and enablement of at least four very different and distinct *Medicago sativa* alfalfa varieties ('CW 95026', 'CW 75046', 'CW 83021', and 'CW 85029') which exemplify the invention and meet the limitations of the claims. Furthermore, the '424 application provides breeding methodologies for developing further alfalfa varieties which meet the limitations of the claims.

5. Using plant breeding methods set forth in the '424 application and/or breeding methods well known to those skilled in the art of plant breeding, Cal/West has utilized all four of the exemplified varieties referenced in paragraph #4 above to develop additional *Medicago sativa* alfalfa varieties. Such additional varieties include 'CW 24044', 'CW 34029' and 'CW 35006', wherein each of these additional varieties meet the limitations of pending independent claim 15. 'CW 24044' was developed out of a segregating population which includes 'CW 85029' in its genetic background. 'CW 34029' was developed out of a segregating population with includes 'CW 83021' and 'CW 85029' in its genetic background. 'CW 35006' was developed out of a segregating population with includes 'CW 75046' and 'CW 95026' in its genetic background.

6. 'CW 24044', 'CW 34029', 'CW 35006', 'WinterGold', 'HybriForce 400' and 'WL319HQ' were all included in an alfalfa variety trial seeded in May 2007 at West Salem, Wisconsin.<sup>1</sup> The standability and recovery of all varieties were measured in July 2008. The methods of rating and calculating standability and recovery were the same as those described in the '424 application and all varieties were at similar growth stages when the data was collected. As clearly shown in Exhibit I, 'CW 24044', 'CW 34029' and 'CW 35006' each had 15% or greater more erect stems at late bloom (see Exhibit I, Table A) coupled with 8% or greater faster

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<sup>1</sup> 'WL325HQ' was not included as a check in this trial seeded in 2007 as it is no longer sold in the commercial market.

recovery after spring green-up or after harvest (see Exhibit I, Table B) when compared to each of the commercial check varieties 'WinterGold', 'HybriForce 400' and 'WL319HQ'. As shown in Exhibit I, the three new commercial checks had standability and recovery ratings which were from 300% to 633.3% and from 15.4% to 24.3% greater, respectively, than the three commercial checks.

7. I further declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the above-referenced application or any patent issuing thereon.

Respectfully submitted,

Date: 12.07.09

By: David W. Johnson  
David W. JOHNSON

103684 v2/DC

## Exhibit I

**Table A.** Additional *Medicago sativa* alfalfa varieties exhibiting 15% greater standability as compared to the checks 'WinterGold', 'HybriForce 400', 'WL319HQ'.

Entry	Commercial Name	Pedigree	7/26/2008	Standability Rating	Standability Rating	Standability Rating
			Standability Rating	% of 'HybriForce 400'	% of 'WinterGold'	% of 'WL 319HQ'
'CW 24044'	PGI 459	<i>D4-SFGrazer-00-CAWD (CW 84025, CW 84028, CW 85029, CW 75044)</i>	4.67	350.0%	280.0%	466.7%
'CW 34029'	Actis, Pillar	<i>D4-YT-SF-ELITE (Recovery CW 83021, CW 85029) Px</i>	5.00	375.0%	300.0%	500.0%
'CW 35006'	Charger	<i>D5-CE03 (Standability CW 75046, CW 95026)</i>	6.33	475.0%	380.0%	633.3%
'HybriForce 400'	Check		1.33	100.0%		
'WinterGold'	Check		1.67		100.0%	
'WL319HQ'	Check		1.00			100.0%
Mean			3.33			
LSD			1.07			
CV			19.75			
Trial Name:	A07WIW					
Trial Location:	West Salem, WI					
Date Seeded:	May 3, 2007					
Note: 'WL325HQ' was not included as a check in this 2007 seeded trial as it is no longer sold in the commercial market.						

## Exhibit I

**Table B.** Additional *Medicago sativa* alfalfa varieties exhibiting 8% faster recovery as compared to the checks 'WinterGold' 'HybriForce 400', 'WL319HQ'.

Entry	Commercial Name	Pedigree	7/26/2008	Recovery cm/day	Recovery cm/day	Recovery cm/day
			Recovery cm/day	% of 'HybriForce 400'	% of 'WinterGold'	% of 'WL 319HQ'
'CW 24044'	PGI 459	D4-SFGrazer-00-CAWD (CW 84025, CW 84028, CW 85029, CW 75044)	2.26	120.1%	117.3%	116.0%
'CW 34029'	Actis, Pillar	D4-YT-SF-ELITE (Recovery CW 83021, CW 85029) Px	2.33	124.3%	121.4%	120.0%
'CW 35006'	Charger	D5-CE03 (Standability CW 75046, CW 95026)	2.24	119.5%	116.8%	115.4%
'HybriForce 400'	Check		1.88	100.0%		
'WinterGold'	Check		1.92		100.0%	
'WL319HQ'	Check		1.94			100.0%
Mean			2.10			
LSD			0.13			
CV			3.68			
Trial Name:		A07WIW				
Trial Location:		West Salem, WI				
Date Seeded:	May 3, 2007					
Note: 'WL325HQ' was not included as a check in this 2007 seeded trial as it is no longer sold in the commercial market.						